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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/440,645	11/16/1999	AVERY FONG	5244-0109-2	3214
22850	7590	01/09/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			PARTON, KEVIN S	
		ART UNIT	PAPER NUMBER	
		2153	L6	
DATE MAILED: 01/09/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	Z
	09/440,645	FONG ET AL.	
	Examiner	Art Unit	
	Kevin Parton	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 17 October 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-36 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 08/21/2003 have been fully considered but they are not persuasive. Please see the following reasons and the grounds of rejection below.
2. The applicant argues "independent claim 1 now also clarifies that both 'the monitoring and communicating unit reside in the device'" (page 9, paragraph 4). The argument is not persuasive because the applet of Middleton, III et al. (USPN 6,393,407) provides both the monitoring unit and the communicating unit within the monitored device.
3. The applicant argues "one objective of the device of the claimed invention is to provide a monitoring of a user's interaction with an interface to determine how the user interacts... Middleton is designed to determine a user's interaction with a web program to change the contents... [the] claimed invention does not have such an objective" (page 10, paragraph 4). The argument is not persuasive because the Middleton, III et al. (USPN 6,393,407) reference reads on the limitations of the claims as shown. Regardless of the end objective of the applicant's disclosed device, the reference provides the functions of the claims as written. The objective of the applicant's device is not included as a claim limitation.
4. The applicant further argues "Middleton requires the initial connection to the destination of the monitored data... it must be the case that the connection is initially made prior to the monitoring" (page 10, paragraph 6). The Examiner conceded in the previous rejection that the Middleton, III et al. (USPN 6,393,407) reference does connect to a remote server to download the applet before monitoring. However, a secondary reference was used to show a system wherein this initial connection was not required. Regardless of the manner in which the

reference of Middleton, III et al. (USPN 6,393,407) receives the applet (a user could install it by hand) it would still provide the same monitoring and communication functions that read on the claims. Combining this with Middleton, III et al. (USPN 6,393,407) does not in any way hinder the overall function of the reference and would be obvious as shown in the previous rejection. Further, please note that in column 5, lines 46-52, Middleton, III et al. (USPN 6,393,407) points out that the destination of the logs may not be the server from which the page was downloaded.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 2,, 5, 7, 8, 10, 11, 14, 16, 17, 19, 20, 23, 25, 26, 28, 29, 32, 34, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Middleton, III et al. (USPN 6,393,407) in view of Fujiyama et al. (USPN 6,336,141) and Sawada (USPN 6,141,507).

7. Regarding claims 1, 10, 19, and 28 Middleton, III et al. (USPN 6,393,407) teach a system for monitoring the usage of a web page comprising:

- a. An interface of a target application in a device, the interface comprising a plurality of operations to be selected by a user (figure 1; column 4, lines 10-22).
- b. A monitoring unit configured to monitor data of selecting of the plurality of operations of the interface by the user, and to generate a log of the monitored data (column 4, lines 22-25), the log of the monitored data being in a form of

a map mapping key data in a key portion of the map to respective value data (column 4, lines 35-49).

- c. A communicating unit configured to receive an object including the log of the monitored data, and to communicate the log of the monitored data (column 5, lines 47-49; column 5, line 66 – column 6, line 2).
- d. Wherein the monitoring unit and communicating unit reside in the device (column 4, lines 22-25; column 5, lines 46-52).

Although the system disclosed by Middleton, III et al. (USPN 6,393,407) shows substantial features of the claimed invention, it fails to disclose means wherein

- a. Each instance of the key data is mapped with a value in a corresponding value portion.
- b. The monitoring unit is configured to generate the log of the monitoring data without any initial connection to a destination to receive the log of the monitored data from the communicating unit.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Middleton, III et al. (USPN 6,393,407), as evidenced by Fujiyama et al. (USPN 6,336,141) and Sawada (USPN 6,141,507).

In an analogous art, Fujiyama et al. (USPN 6,336,141) discloses a system for storing network element monitored data in a log. In this log each instance of the key data is mapped with a value in a corresponding value portion (figure 9; figure 12). Note that in the reference, string data can be assigned to key values for each monitoring report. Note that any piece of key data for which there is no value, a place is still reserved with a null value.

Given the teaching of Fujiyama et al. (USPN 6,336,141), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Middleton, III et al. (USPN 6,393,407) by employing the use of a map wherein each piece of key data has an associated value in the value portion of the map. This benefits the system by providing consistency in the file size and in the storage method of the monitored log. In addition, when multiple records are reported, this gives the log a more readable appearance. Please note that the use of any type of map structure that links the key data to the corresponding value would have worked in this situation.

Additionally, in an analogous art, Sawada (USPN 6,141,507) discloses a system for monitoring elements on a network comprising means wherein the monitoring unit is configured to generate the log of the monitoring data without any initial connection to a destination to receive the log of the monitored data from the communicating unit (column 4, lines 20-29).

Given the teaching of Sawada (USPN 6,141,507), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Middleton, III et al. (USPN 6,393,407) by allowing the monitoring unit to monitor without being connected to the server to which the logs would be sent. This would allow for monitoring of client use of a cached element when the server is not accessed. This benefits the system by allowing for usage monitoring when the client is disconnected from the network. Please note that although the system of Middleton, III et al. (USPN 6,393,407) does require connection to a server, it is because the user's interaction with this server is being monitored. The logic used to monitor the user could easily be loaded local to the user and data stored for later transmission.

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8. Regarding claims 2, 11, 20, and 29, Middleton, III et al. (USPN 6,393,407) teach all the limitations as applied to claims 1, 10, 19, and 28, respectively. They further teach means wherein the target application is a software application and the interface is a display screen of the software application (column 3, lines 43-60; figure 1).

9. Regarding claims 5, 14, 23, and 32, Middleton, III et al. (USPN 6,393,407) teach all the limitations as applied to claims 1, 10, 19, and 28, respectively. They further teach means wherein the communicating unit sends the log of the monitored data when the user exits the target application (column 5, lines 47-53).

10. Regarding claims 7, 16, 25, and 34, Middleton, III et al. (USPN 6,393,407) teach all the limitations as applied to claims 1, 10, 19, and 28, respectively. They further teach means wherein the key data and the value data in the map both contain string data (column 4, lines 35-49).

11. Regarding claims 8, 17, 26, and 35, Middleton, III et al. (USPN 6,393,407) teach all the limitations as applied to claims 1, 10, 19, and 28, respectively. They further teach means wherein the value data portion includes vectors that contain string data. (column 4, lines 35-49; figure 2). Note that vector format is not explicitly stated in the reference but is the implied method of storage due to the linking of key data to the values for that data that will have several different values for one session (hover time, for example).

Although the system disclosed by Middleton, III et al. (USPN 6,393,407) shows substantial features of the claimed invention, it fails to disclose specifically that plural vectors are used wherein each vector contains an array of string data.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Middleton, III et al. (USPN 6,393,407), as evidenced by Fujiyama et al. (USPN 6,336,141).

In an analogous art, Fujiyama et al. (USPN 6,336,141) disclose a system for storing network element monitored data in a log. In the log, there are plural vectors each of which corresponds to an array of string data (figure 9; figure 12). Note that in the reference, each column of the log would be an array of string data with some null values.

Given the teaching of Fujiyama et al. (USPN 6,336,141), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Middleton, III et al. (USPN 6,393,407) by employing the use of plural vectors in the log (map structure) to store the data. This benefits the system by making the data easier to store and read. Note that any type of map structure that maps key data to their data types would work.

12. Claims 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Middleton, III et al. (USPN 6,393,407), Fujiyama et al. (USPN 6,336,141), and Sawada (USPN 6,141,507) as applied to claims 1, 10, 19, and 28 above, and further in view of Motoyama (USPN 5,887,216).

13. Regarding claims 3, 12, 21, and 30, Middleton, III et al. (USPN 6,393,407), Fujiyama et al. (USPN 6,336,141), and Sawada (USPN 6,141,507) teach all of the limitations as applied to claims, 1, 10, 19, and 28, respectively.

Although the system disclosed by Middleton, III et al. (USPN 6,393,407), Fujiyama et al. (USPN 6,336,141), and Sawada (USPN 6,141,507) shows substantial features of the claimed

invention, it fails to disclose means wherein the target application is an image forming device and the interface is an operation panel of the image forming device.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Middleton, III et al. (USPN 6,393,407), Fujiyama et al. (USPN 6,336,141), and Sawada (USPN 6,141,507), as evidenced by Motoyama (USPN 5,887,216).

In an analogous art, Motoyama (USPN 5,887,216) discloses a system for communicating user configuration of an image forming device wherein the target application is an image forming device and the interface is an operation panel of the image forming device (figure 1; figure 5).

Given the teaching of Motoyama (USPN 5,887,216), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Middleton, III et al. (USPN 6,393,407), Fujiyama et al. (USPN 6,336,141), and Sawada (USPN 6,141,507) by employing the concept of usage monitoring on the image forming device. Image forming devices are often located remotely from their manufacturers and maintenance contractors. By monitoring usage and errors, the contractors can more quickly and accurately diagnose and remedy problems with the machine benefiting the client and the contractor.

14. Regarding claims 4, 13, 22, and 31, Middleton, III et al. (USPN 6,393,407), Fujiyama et al. (USPN 6,336,141), and Sawada (USPN 6,141,507) teach all of the limitations as applied to claims, 1, 10, 19, and 28, respectively.

Although the system disclosed by Middleton, III et al. (USPN 6,393,407), Fujiyama et al. (USPN 6,336,141), and Sawada (USPN 6,141,507) shows substantial features of the claimed

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invention, it fails to disclose means wherein the target application is an appliance and the interface is an operation panel of the appliance.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Middleton, III et al. (USPN 6,393,407), Fujiyama et al. (USPN 6,336,141), and Sawada (USPN 6,141,507), as evidenced by Motoyama (USPN 5,887,216).

In an analogous art, Motoyama (USPN 5,887,216) discloses a system for communicating user configuration of an image-forming device wherein the target application is an appliance and the interface is an operation panel of the appliance. (figure 1; figure 5). Note that the term “appliance” is vague and is taken here to be any type of equipment with a user interface and a business or household application.

Given the teaching of Motoyama (USPN 5,887,216), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Middleton, III et al. (USPN 6,393,407), Fujiyama et al. (USPN 6,336,141), and Sawada (USPN 6,141,507) by employing the concept of usage monitoring on the image forming device. Image forming devices are often located remotely from their manufacturers and maintenance contractors. By monitoring usage and errors, the contractors can more quickly and accurately diagnose and remedy problems with the machine benefiting the client and the contractor.

15. Regarding claims 6, 15, 24, and 33, Middleton, III et al. (USPN 6,393,407), Fujiyama et al. (USPN 6,336,141), and Sawada (USPN 6,141,507) teach all of the limitations as applied to claims, 1, 10, 19, and 28, respectively.

Although the system disclosed by Middleton, III et al. (USPN 6,393,407), Fujiyama et al. (USPN 6,336,141), and Sawada (USPN 6,141,507) shows substantial features of the claimed invention, it fails to disclose means comprising a setting unit configured to set a number of sessions of the target application to be executed by the user prior to the communicating unit communicating the log of the monitored data.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Middleton, III et al. (USPN 6,393,407), Fujiyama et al. (USPN 6,336,141), and Sawada (USPN 6,141,507), as evidenced by Motoyama (USPN 5,887,216).

In an analogous art, Motoyama (USPN 5,887,216) discloses a system for communicating user configuration to a central server comprising a setting unit configured to set a number of sessions of the target application to be executed by the user prior to the communicating unit communicating the log of the monitored data (figure 12). Note that in the reference, analyzing the settings leads to communication with the server.

Given the teaching of Motoyama (USPN 5,887,216), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Middleton, III et al. (USPN 6,393,407), Fujiyama et al. (USPN 6,336,141), and Sawada (USPN 6,141,507) by employing the use of a variable to note how many times an action occurs before sending data. This benefits the system because during slow use periods, wasted communications can be avoided to reduce traffic and processor load.

16. Regarding claims 9, 18, 27, and 36, Middleton, III et al. (USPN 6,393,407), Fujiyama et al. (USPN 6,336,141), and Sawada (USPN 6,141,507) teach all of the limitations as applied to claims, 1, 10, 19, and 28, respectively.

Although the system disclosed by Middleton, III et al. (USPN 6,393,407), Fujiyama et al. (USPN 6,336,141), and Sawada (USPN 6,141,507) shows substantial features of the claimed invention, it fails to disclose means wherein the communicating unit communicates the log of the monitored data by Internet mail.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Middleton, III et al. (USPN 6,393,407), Fujiyama et al. (USPN 6,336,141), and Sawada (USPN 6,141,507), as evidenced by Motoyama (USPN 5,887,216).

In an analogous art, Motoyama (USPN 5,887,216) discloses a system for communicating user configuration to a central server comprising means wherein the communicating unit communicates the log of the monitored data by Internet mail (column 4, lines 39-42).

Given the teaching of Motoyama (USPN 5,887,216), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Middleton, III et al. (USPN 6,393,407), Fujiyama et al. (USPN 6,336,141), and Sawada (USPN 6,141,507) by employing the use of the Internet for communication back to the central server. This allows the system to be monitored by entities outside the operating network and for increased security in the transmission of the log files. The central server can reside at a contractor facility and allow for maintenance from that location rather than an on-site visit.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Parton whose telephone number is (703)306-0543. The examiner can normally be reached on M-F 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (703)305-4792. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

Kevin Parton
Examiner
Art Unit 2153

ksp



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